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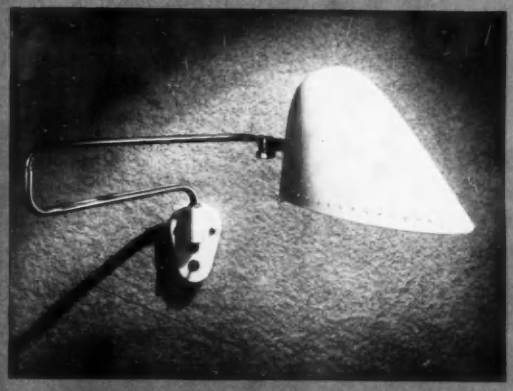

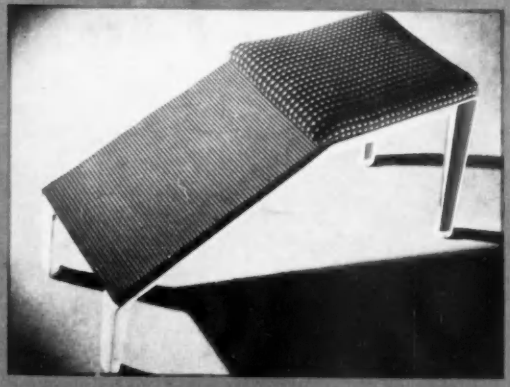

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The Council of Industrial Design

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NUMBER 34
OCTOBER 1951

Design

The monthly journal for manufacturers and designers, issued by the Council of Industrial Design and the Scottish Committee of the Council

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EDITOR: Alec Davis

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No cause for complacency

SEVERAL PAPERS have commented on the apparent discrepancy between the standard of the architecture on the South Bank and the design of the manufactured exhibits. Such inequalities were of course to be expected from the nature of the whole exercise; the buildings were all specially designed for the occasion, but it was always a cardinal point of policy that the exhibits were not to be special pieces or exhibition stunts but were to be selected as far as possible from commercial production lines; only in the Homes and Gardens section, where the designers were set particular problems of space-saving in the home, were certain individual prototypes admitted, and in many cases these did not seem to measure up to the best that the trades can produce. Some of these prototypes appeared not to have gone beyond the invention stage; a good idea needs more time for working out and refining than was possible in the months preceding the Festival.

It is not surprising that critics have observed that higher standards were often achieved in the exhibition fittings than in the commercially manufactured exhibits. The electric lighting industry, for instance, has long been in need of new thought and inspiration. The architects and interior designers of the various pavilions brought a fund of fresh imagination to these details which could not be matched from the Council of Industrial Design's Stock List of current production. There is a good chance that the South Bank will stimulate new ideas and experiment in this important industry.

In others, such as jewellery, pottery, glass, silverware or clocks, there was no such healthy comparison between what the trades produce and what designers can do for a special occasion, and for these industries it is too early to forecast the Festival's effect on design. One thing is certain, however: a selective exhibition offers a greater incentive towards raising standards than does a trade fair, if only because it encourages the manufacturer to review his production, once in a while, from the standpoint of quality and design rather than immediate sales and turnover. Just as bloodstock must at intervals be bred out, so industrial design needs periodically to break away from the run of the mill. It was with this in mind that the Council of Industrial Design invited manufacturers to submit to the 1951 Stock List (now called Design Review) what they considered to be their best work irrespective of current sales-curves.

In some categories the results have been outstanding—notably in

scientific and precision instruments, where the union of art and industry seems to have developed instinctively; in others—and disconcertingly in many of those industries where taste is essential—it has been a difficult task to assemble more than a handful of distinguished contemporary designs. Design Review has revealed very clearly the different standards achieved and the different sources of inspiration. Where functional considerations are predominant, a fairly uniform standard is maintained; there is not much to choose in outward appearance between the many kitchen cookers, cabinets or refrigerators on the market. Where decorative values are uppermost, the poverty of contemporary ornament plays into the hands of the "repro" merchants. Clockmakers, for instance, have developed no contemporary idiom beyond a few dated clichés, such as parallel lines of chromium, fat radii, or stepped angular cases, while the potters are frankly traditional in their approach to decoration. It seems, indeed, that only in furniture, furnishing textiles and wallpaper has a recognisable contemporary trend developed; but there could be no more influential pacemakers than these three.

Thus, though we may praise the general level of design on the South Bank as being far higher than that of a trade fair, there is no cause for complacency; the Festival and Design Review have measured not only the distance gone but also the distance still to go. P. R.

Notebook

AT THE BRITISH ASSOCIATION meeting in Edinburgh, H R H the Duke of Edinburgh said, in his presidential address: "Where basic scientific principles are known by all nations, the advantage lies in the good design of equipment for practical use." From his Naval experience, he spoke of the many instances of apparatus coming into operational use exactly as it left the inventor—scientifically sound but ill-designed for use under service conditions.

This criticism might well be a challenge to British manufacturers to give more thought to the design of their products from the user's point of view. And it need not be restricted to manufacturers of naval equipment.

BUSINESS EXECUTIVES from a number of countries, meeting in the 1951 Design Congress (page 27), discussed the theme "that design policy within industry is the responsibility of high-level management."

There was general agreement that a firm's policy must be the concern of someone at the top, with less general agreement on the extent to which it should reflect personal taste. T. Marchetti, of Crossleys, explained that he was responsible for every carpet design produced by his firm—"and for the progress of each design from its earliest stage as a rough sketch until it sees the light of day as a finished carpet"; W. T. Wren, of Allied Ironfounders, expressed the view that "the final decision on new designs should, so far as a company is concerned, be vested in one individual"; but another speaker in an industry closely related to Mr Wren's, Dr Harold Hartley, of Radiation, emphasised that "design can no longer be determined by the personal preferences of one man." All agreed on the need for teamwork in the development of a design from the idea to the production stage.

BERNARD HOLLOWOOD, in a recent Third Programme broadcast, discussed the economics of design, and warned his audience against facile comparisons between American and British practice. "It would," he said, "be misleading to suggest that the design problems of industry operating under conditions of economic plenty are in any way related to the problems of British industry."

It is therefore the more interesting to note that American manufacturers are not *all* reconciled to the practice of designing for obsolescence, as a means of sales-promotion: to quote again from a Design Congress paper, Arthur A. Houghton, Jnr, pointed out that millions of hours of labour and millions of tons of materials are used in making articles which are scrapped while they are still useful because they are lacking in the element of satisfaction. He considered that to discard goods before their usefulness is exhausted is gross economic waste, "a luxury which our civilisation can no longer afford": words which have an almost European ring about them.

TAILPIECE: Sign on a shopfront in West London: GOOD TASTE LTD. Sign on the window of the same shop: WE BUY AND SELL ALMOST ANYTHING.

A. D.

Class distinction

THESE ARE NOT before-and-after pictures. It would be comforting to think that they were, but in fact they show two rooms of the same date—both in the new Swedish steamship *Patricia*. The room below in contemporary style is the second-class bar, furnished by A B Nordiska Kompaniet, Stockholm; the other room, whose "period" we leave to the reader's imagination, is the first-class smoke-room by Maple and Co Ltd, London

The interior design of

FACTORIES AND OFFICES

by Mark Hartland Thomas, OBE, MA, FRIBA, MSIA

"Starting from scratch" in factory planning is a luxury which few British manufacturers can enjoy. This article shows that, with goodwill and a sense of design, it is possible to improve working conditions — and consequently increase output — in existing buildings

MANY FACTORIES in Britain are in old buildings, some dating from the Industrial Revolution or soon after: how does a manager of good intention begin to tackle the problem of his factory environment? To recondition the whole place in one operation can be a problem that baffles imagination, but reduced to human terms it is not unmanageable.

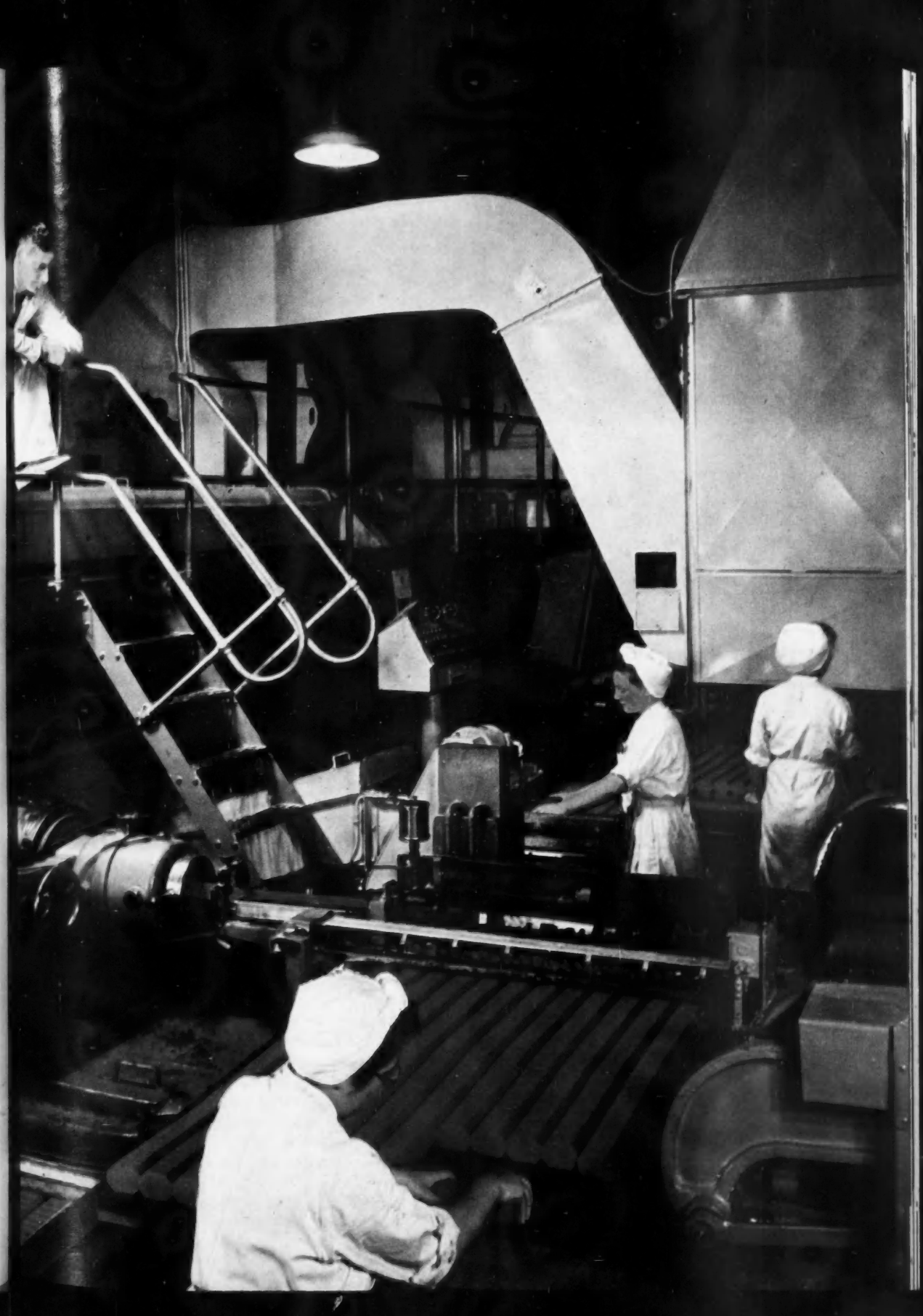
Start from the worker or typist at a desk. I mean the people in *your* factory, each at the point of work, individually in their actual places. Imagine yourself working in that place all day and consider how far the commonsense needs of the human body and mind are met.

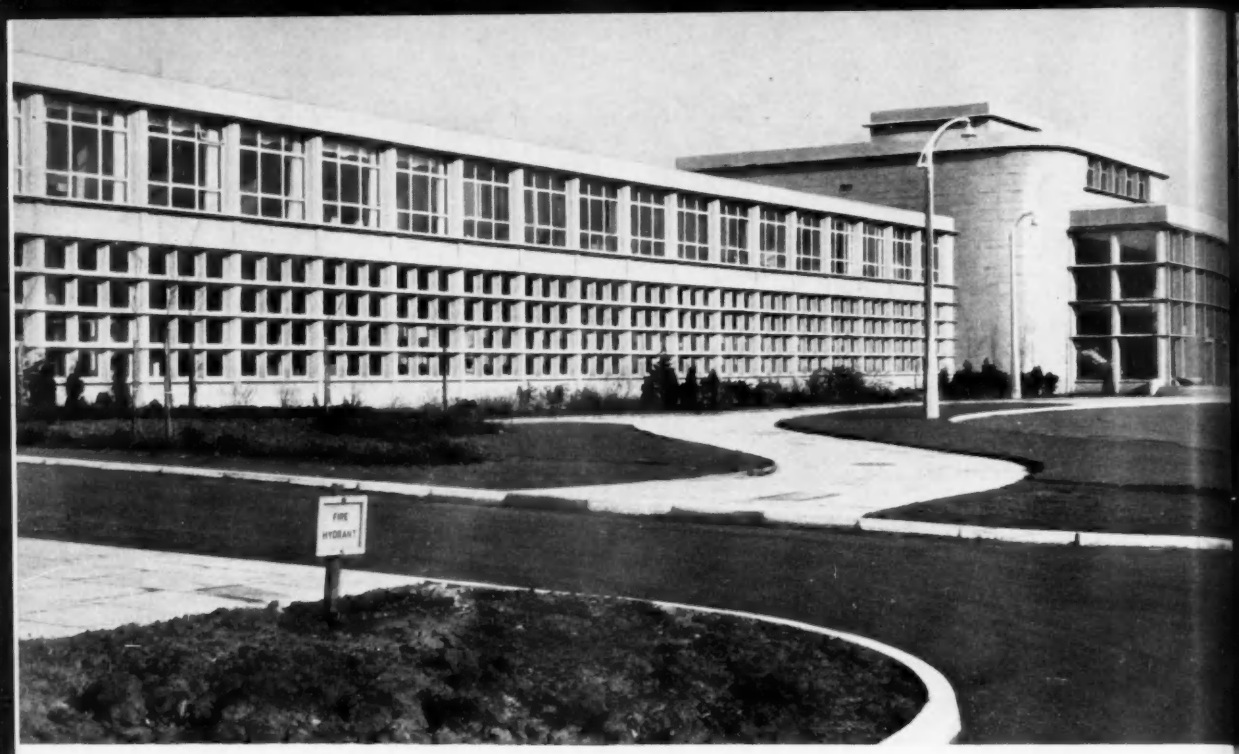
Is the typist's table low enough or does she have to perch on three telephone directories? And the lighting? I have seen an office where the desk is continuous, along below the windows, and the clerks work facing the glare of sunlight reflected off the asbestos-cement roof of a lower building under the windows outside. Similarly it is common, but bad, practice in routine laboratories to run the benches under the windows; this causes readings to be taken in shadow with the instrument silhouetted against the light. In both cases the benches or desks should be arranged at right angles to the windows.

This question of glare, or brightness-contrast, repays close attention throughout the works. As a general rule it may be taken that in any room where the windows are on one side only, without cross-lighting, the window-bars and reveals should be painted dead white, so as to bring them as near as possible to the brightness outside. If there is a brick reveal outside, that too should be painted white (which is often seen in Georgian houses). This rule applies particularly to the north-light factory roof, in which sky-glare can be very unpleasant. The opposite slope of roof should be white also, or very pale, but the roof trusses—usually of slender steel—can be painted in a gay colour.

Still on the question of brightness-contrast, let us go back to the desk. The dark mahogany or shiny black desk-top is nowadays giving way to a pale shade of grey plastic-cloth or natural wood. This is done to lessen the brightness-contrast with white paper. Similarly typewriters and other office machinery are being finished in pale grey, with a matt surface instead of shiny, to avoid mirror reflections of windows and electric lights. Filing cabinets are at last getting away from their dark green to a variety of pastel shades. In a crowded office the colour of the furniture —especially the serried bank of filing cabinets—is more noticeable than that of the walls. There will be disappointment if you redecorate your office and then bring back all the jumble of old cabinets. Better to paint them all to match the new wall colour, if that colour has been carefully chosen to suit the room. This can give a feeling of peacefulness and quiet efficiency in place of a restless confusion of different shapes.

Soap factory (Lever Bros and Unilever, Port Sunlight) redecorated by the Psychromatics Division of Holland and Hannen and Cubitts Ltd in conjunction with the British Colour Council. Note the blue colour used to show up the red soap and the varied pastel shades elsewhere, to rest the workers' eyes when they look up
(*Photo: courtesy* Business, The Journal of Management in Industry)





The same applies even more in a large factory: the walls become very unimportant, since they are seen mostly in small patches in the distance beyond the vista of massed machines. That is one reason why the colouring of machines is now gaining so much attention. As they become, in general effect, the decoration of the room, it is usual to paint them all the same colour—a pale blue-green as the general colour for machines has often been used with success. This colour is generally acceptable to people (an important consideration in the colour of workplaces, which should be done to average rather than individual tastes) but not so uninteresting as the still more usual cream and green, which is the neutral taste in decoration *par excellence*, to be seen everywhere.

On the other hand there is psychological advantage in colouring machines differently: it helps a worker to take a pride in his own machine. This must not go so far as to let each choose his own colour, but much can be done within the terms of a coherent scheme.

At the operative point on a machine or bench the same rules apply as for the clerk's desk, and even more strictly, for the area of concentrated attention is often more condensed. Mirror reflections must be avoided: this is often very difficult if there are moving lubricated polished metal parts. The colour chosen should be in gentle contrast to that of the work-piece (blue-grey for working brass, brown-grey as a background to steel or aluminium) and the colour and tone of knobs and dials should also be slightly different from the background. If handles are out of sight, they should be different in *shape*, to be identified by touch and of a shape that makes it natural to push, pull or turn as appropriate.

Within the field of vision there must be no bright touches of decoration to distract the attention. Conversely to this rule, there is the practice of painting the insides of safety guards a brilliant orange, so that the colour cries aloud to heaven until someone puts the guard on again.

Away from fixed places of work, more adventurous schemes of colour should be cultivated. These can give a welcome relief to the eye. I once had one wall of a dreary office corridor painted bright orange and the opposite wall bright blue. I explained to the manager that the idea was to give his people something else to think of than their troubles, as they went about their business. Another reason was to alter the apparent shape of the corridor—an example of changing the architecture by means of decoration.

Similarly in tank-rooms or engine-rooms where attention to the machinery is intermittent, it is legitimate, and desirable, for the decorator to cultivate witty and stimulating effects. Much in engineering detail has the character of abstract sculpture, if the possibilities are brought out by colour.

Patons and Baldwins' knitting-wool factory at Darlington. (Left) Exterior, with main entrance. (Above) Part of the 13-acre spinning shed. The design of this new factory avoids visible roof trusses and cuts off the apex of the roof to house the ventilating plant. The walls are lost in the distance.

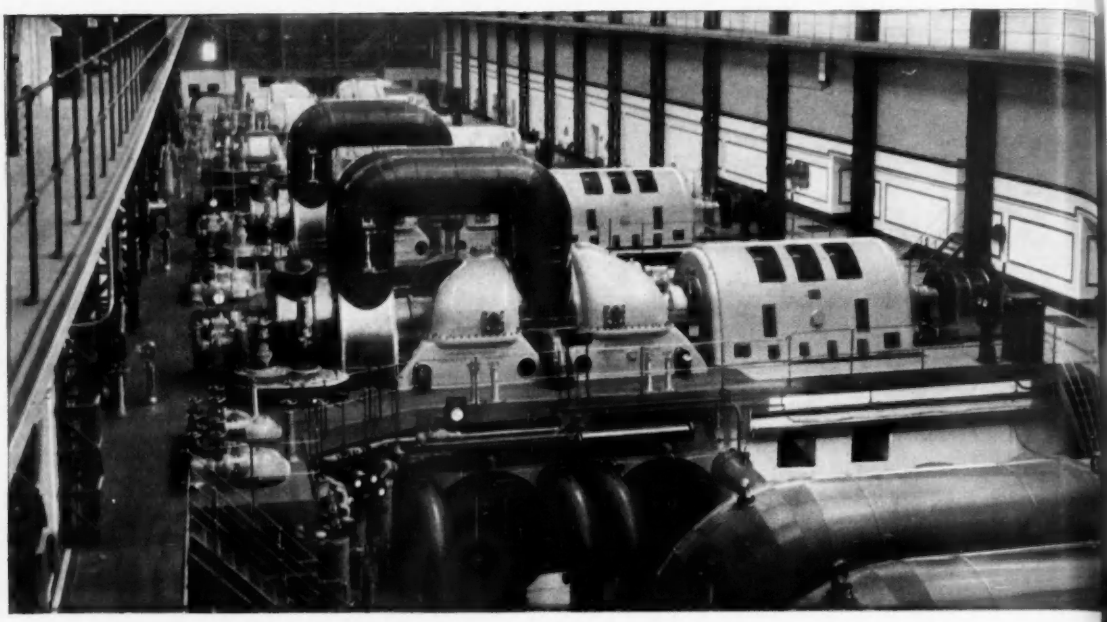
Building and civil engineering contractors, John Laing and Son Ltd: consultants, Sir Alexander Gibb and Partners

Nowadays the question of colour schemes for factories is the subject of much systematic research. It is the modern fashion to apply scientific method to any problem that crops up: but on the whole the results of research into psychology or ergonomics tend to confirm the findings of common sense and good taste, rather than break new ground. The common associations of colours with feelings are confirmed—"warm" colours and "cool" ones, restful and stimulating, foreground and distant. In choosing colours for rooms, a good way to begin is to group the rooms according to their aspect and daylight, and according to the work to be done in them.

For instance, I once had the problem of a warehouse with offices and showrooms in a seven-storied block. The offices divided into those with plenty of daylight and some sunshine, and those facing on to courtyards with poor natural lighting. This prompted a restful French grey for the former, to reduce glare, and a very pale peach or buff for the rooms with little daylight and no sunshine. In both kinds of office a quiet effect was sought: but in the warehouse, where there was movement and manual work, stimulating colours were introduced, such as rich terracotta for one wall, in contrast with ivory white on the windows and window walls, and blue for free-standing iron columns.

The showrooms presented a different problem

Cadbury Bros, at Bournville, have been carrying out improvements in colouring, under a design committee. Note the pale colours at the windows and skylights, roof trusses coloured in gentle contrast, and pale working surfaces



Belfast Harbour Power Station: generating plant. Questions of colour in relation to workers at machines do not arise here, so that the opportunity is taken to dramatise further by decoration this, the most impressive room in a power station
(Colour blocks courtesy Metropolitan-Vickers Electrical Co Ltd)

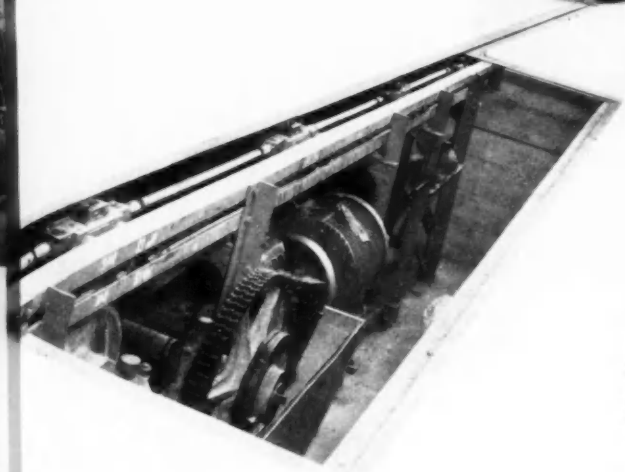
again—that of a good background for displays. The walls and floor had to merge into one general tone, together with the display fittings, so that the easiest thing to see would be the goods on show. One showroom was for household textiles, predominantly white. To make the white appear whiter, the walls and floor were done a very dark tobacco brown and the ceiling pale *eau-de-Nil*, the former by contrast and the latter by reflectance to put blue into the white, on the same principle as the blue-bag on washing day. The window wall was coloured the same as the ceiling to lessen the brightness-contrast.

In a scheme like this, common sense produces a system upon which the kind of effect required in each place can be determined, and thence an approximation found to the choice of colours. The theory of colour harmony and contrast (knowledge of the "colour circle") carries one a good step further, but a natural sense of colour and plenty of practice are essential for making the exact choices.

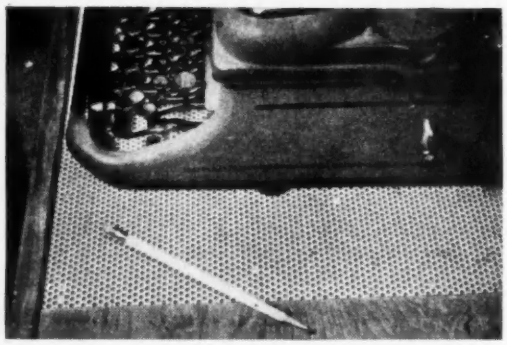
I suggested above that it made a good beginning to start with *people at work* and try to see their environment through their eyes. The discussion should never go very far from the human factor, but the *general* impression of a room, which has an important but subconscious effect upon people's spirits, can also be discussed in more general terms. There are always architectural possibilities that can be realised by skilful decoration. The current fashion to paint one wall in a strongly contrasting colour is a useful device for emphasising the most promising character in the shape of a room. For example, a room's chief claim to distinction may be its height: the coloured wall carries the eye upward for an instant to note this.

It is a pity to over-simplify the problem by choosing a standard scheme throughout a whole works, still worse to prescribe the same for a firm's many branches in different localities; though I know how tempting this is, from the administrative point of view. It misses the opportunity of getting the best possible effect by skilful attention to detail and, perhaps more important, of enlisting local enthusiasm in improving the works environment, guided by expert advice. This is worth doing for its own sake and it can be the beginning of a better attitude to the work, resulting in higher productivity and sounder quality. Some firms have tackled this problem by setting up internally a design committee to oversee the work of an interior designer, who is either a free-lance consultant or a permanent member of the staff. Such committees are

Patons and Baldwins, Darlington. An elegant solution of the conveyor problem which leaves the floor clear of obstruction: the trolleys have a catch which can be depressed into a groove in the floor and engages with an endless chain, carried round by motors sunk below the floor
(Photos: John Laing and Son)



In the workshop at The Building Research Station there were complaints of eye-strain. These were found to be due to excessive brightness-contrast between the working surfaces and the upper part of the room (below, left). Turning some of the lights upwards effected a cure
(Crown copyright reserved. Published by permission of the Director of Building Research)



Sound-absorbent pads below and behind the typewriter allow the typist to work close to the executive, with only a waist-high partition between. The designer, Maria Bergson, in a conversion job at the Time and Life Building, New York, abolished many of the small offices in this way and saved a quarter of the space
(*Photos:* The Magazine of Building, *USA*)

This locker at Patons and Baldwins provides a seat for the worker when she is not moving round her machine, and keeps her belongings close to her. This is more convenient, and saves time and cloakroom space

sometimes concerned with the design of the products, as well as that of the environment.

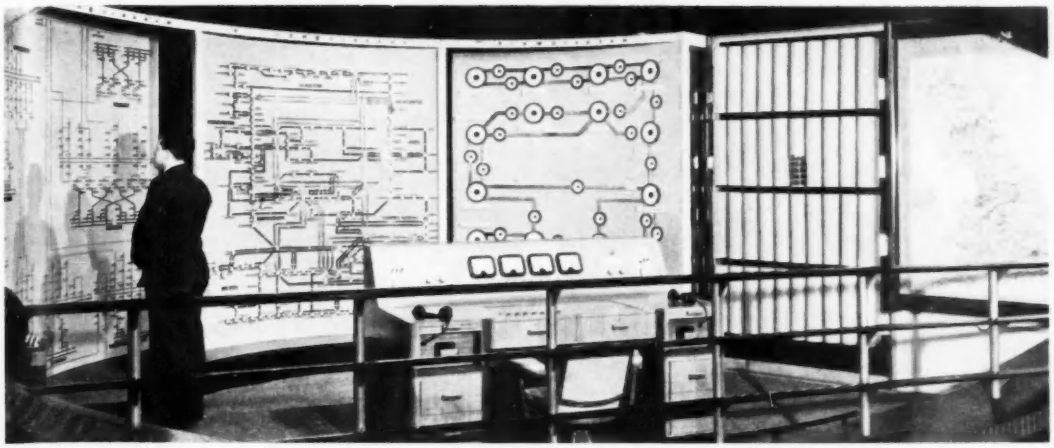
In spite of my plea for individual treatment and against standardisation, I must mention one general consideration: that is, to avoid dadoes like the plague. It is rare for a room to be improved by a dado, and common for it to spoil everything. The worst offence is when a dado round the walls is thoughtlessly repeated around free-standing columns; this cuts them in half visually, and destroys their proper appearance of stout support. Columns should always be the same colour throughout the whole length of the shaft. A different colour does very well for caps and bases, and columns often look well in different colours from the rest of the room—for example, blue shaft with black base and white capital or bracket.

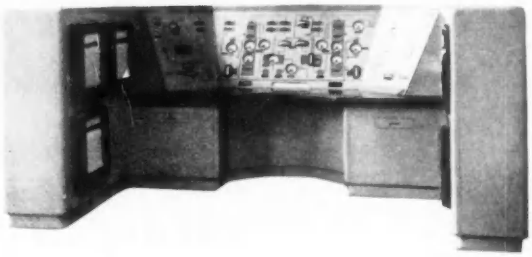
It may be argued that dadoes are needed to resist damage and to put a painted rather than distempered surface where there will be dirt to wash off. Study of actual situations will discover that there is no such thing as an even high-water-mark below which *all* heavy wear occurs; it occurs in patches, often extending quite high up around doors and certain other places. Instead of the standardised dado all round, better appearance and better protection can be obtained by painting the whole height of a wall, or a large part of it, to resist damage—and leaving the rest of the room unimpaired by the ugly dado.

Before summing up the considerations that I have mentioned in regard to colour and lighting, I should add that artificial lighting should follow the same rules as natural. A workshop with all the light shaded downwards on to the work, leaving the upper part in darkness, can be most uncomfortable to the eyes: eye-strain is likely to occur. A reading-lamp with an opaque shade makes a similar glare by brightness-contrast, if it is used in a room without general lighting as well. Small holes near the rim of the shade reduce this effect, but a translucent shade is better.

The best lighting conditions in any place where close work is done, whether factory or office, are provided by a fairly even general light everywhere, with individual adjustable lights at each point of work. Some machinery makers build a light into the machine at the operative place. Dials are also commonly lighted from within.

The general principles to be followed in lighting and colouring are that (1) the work-piece should be the brightest object in the field of vision and in colour-





(*Above*) *A forecast at the South Bank Exhibition of the National Control Room of the near future, for the British Electricity Grid.* (*Right*) *A control panel for process plant by Elliott Bros (London) Ltd. The panel is laid out as a flow diagram of the plant; conditions in every important part are instantly presented to the controller, by electrical recording devices.*

These are examples of the increasing attention that is now being paid to visual problems in the design of displays *for controlling machinery—a subject referred to technically as "psychology" and, more recently, as "ergonomics"*

contrast with its immediate background, (2) to avoid fatigue this brightness- and colour-contrast should not be very sharp, (3) the whole of the room should be well lighted and be decorated in restful tones, and (4) a sparing use of bright colour removed from the usual lines of sight affords a welcome stimulus.

One way of introducing bright colours, which is also of practical value, is for the identification of pipes in a factory. The colours should not be applied along the full length of pipes—a practice that can make nonsense of a scheme of decoration—but in bands of a foot breadth at strategic points, an alternative mentioned in British Standard 1710: 1951, in which the standard colours are specified.

Of other factors that affect the works environment only two more can be touched upon here—the control of noise and mechanical handling. Far too little attention is paid to the former. Reduction of noise should begin at the design of the machine; it should be realised that a noisy machine is an inefficient one in terms of *human* efficiency; it is an imperfect tool for human beings to use. There is a limit to what can be done by the builder to reduce noise. Sound-absorbent ceilings are useful, and in a large machine-shop baffle partitions can be carried part of the way down from the ceiling to divide it into compartments as sound-traps over the machines. These reduce the total build-up of noise intensity. In offices, the use of sound-absorbent pads under typewriters is helpful. The noisiness of typewriters is the chief objection to dividing offices with waist-high partitions, which can save much space as against the fully enclosed compartments, besides looking better and affording easier supervision.

Mechanical handling can be a treacherous servant. Lines of production should be as short and straight as possible, but there is always the conveyor belt to come to the rescue of the bad production-planner. One sees conveyors wandering around factories in the most unsightly and inconsequent manner, getting in everybody's way. Systems that avoid cluttering the floor are to be preferred. A factory in which the conveyor system is like a game of snakes and ladders can hardly be made into an environment whose quiet efficiency is satisfying to mind and eye. Good production-planning is basic, and all other improvement in the works environment must be founded upon it. The improvement of the places *where work is done* is what matters, rather than the pretentious entrance hall, the lavish canteen and the sports pavilion.

Good design proved good business

in these six instances, taken from the furniture, cooker and electric-fire industries

TWO YEARS AGO, the products illustrated on this page and opposite were referred to in DESIGN for the first time. At that date (October 1949, No. 10) it was too early to assess their commercial success or failure; now we are able to show what has happened to their sales over a two-year period.

We acknowledge the co-operation of manufacturers and distributors who have made this feature possible. Though they have in most cases stopped short of giving actual sales figures, it is evident from the statements made, and quoted here, that in these instances good design has been commercially successful.

"A very considerable market"

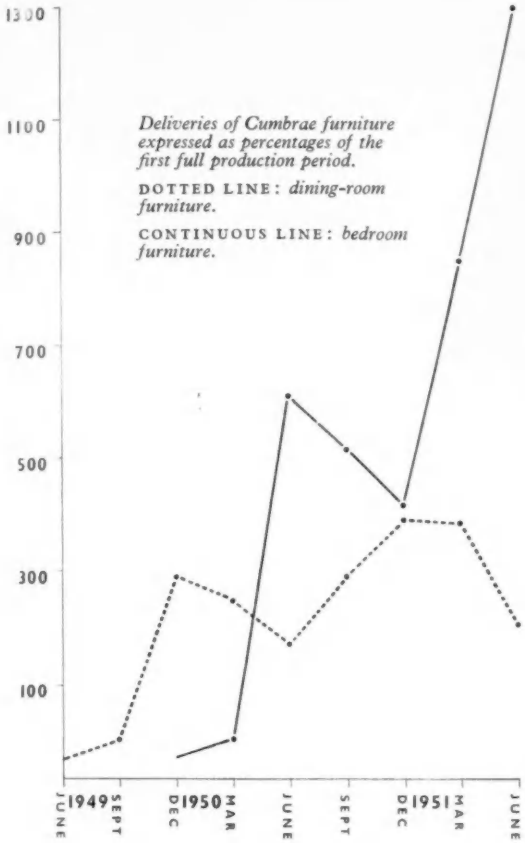
General Gas Appliances Ltd, Manchester, report "a very considerable market" for their table-top model (right), of which many thousands have been sold in this country; while export markets "are showing very definite signs of being on the increase."

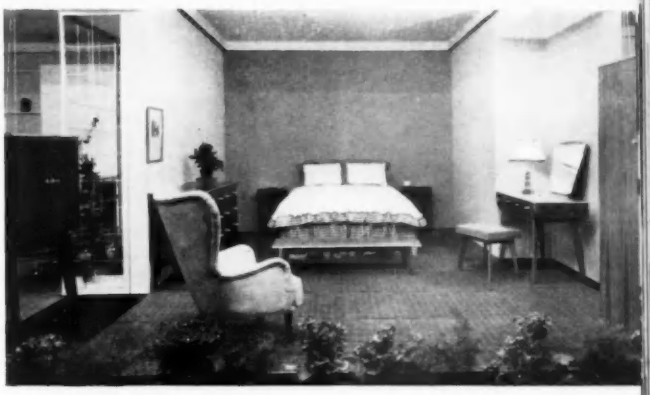
The demand, it is stated, has come chiefly from people living in bed-sitting rooms, for whom its virtue of space-saving is a real advantage

"The figures speak for themselves"

The two types of stick-back chair shown below are Danish. Introduced to the British market by P. E. Stemann, of Finmar Ltd, London SW1, they sold successfully for about a year. At the end of that time, costs of production in Denmark had risen so much that the chairs could no longer be marketed here in the tax-free price range, and this, rather than any falling-off in demand, was the reason for their virtual disappearance from the British market. The Fritz Hansen chair (right) sold 1,000 in eight months; demand for the Danish CWS model (left) began at 300 a month and went on increasing. Contracts in which the Co-op. chairs were used included the remodelling of the Polonia Restaurant, near Victoria Station, London SW1, by Heal's

(Left) Danish Co-op chairs were used by Heal's in the Polonia Restaurant, Grosvenor Gardens





Demand for Cumbrae furniture doubled

"On the whole, demand in the second year has been just about twice as high as in the first year." Thus Neil B. Morris, Managing Director of H. Morris and Co Ltd, summarises the fortunes of the *Cumbrae* range of tax-free furniture—which are shown in more detail in the graph on left.

Australia, Israel, South Africa, Turkey and the United States have all bought *Cumbrae*. It has been widely advertised by its brand-name—still a comparatively rare practice in the furniture trade. At the last *Daily Mail* Ideal Home Exhibition, Collie Knox's four-roomed bungalow was furnished almost entirely with *Cumbrae*; it has been seen in several of the Festival exhibitions, and now a window display featuring *Cumbrae* bedroom furniture has won second place in the display competition for retail furnishers organised by *Furnishing*. This display, illustrated above, was by H. Ponsford Ltd, Sheffield 2. (The chair is not *Cumbrae*.)

This fire has sold in thousands

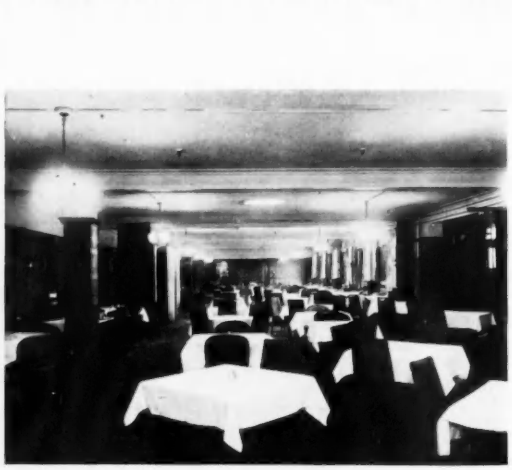
Export to 30 countries is part of the successful sales-record of the HMV *Bruton* fire, with its double-curvature reflector. "We have found it well worth while keeping this particular fire in our catalogue," say EMI Sales and Service Ltd, Hayes. "Many thousands have been distributed. . . . There is no doubt that, if conditions permit, [it] will still be manufactured for many years to come." Two years ago we illustrated this fire in its pre-war form; the modified post-war design is shown on right.

Bought by the Board—for a model kitchen

The fancy hoods and canopies of typical fish-frying equipment are—quite apart from their flashy appearance—the cause of objectionable smells, say John Kelly and Son, of Edinburgh. Hence the unorthodox shape of this firm's *Visidial* deep-fat smokeless fryer. Demonstrable savings in oil and electricity, amounting to 40–50 per cent, have helped to overcome prejudice against it on the grounds of unorthodoxy, and it has been installed in places as different as a hospital at Stockton-on-Tees, an explosives factory in Wales, and various canteens in Scotland and South Africa. Three Electricity Boards tested and approved it, and the South Eastern Board, on their cookery expert's recommendation, installed a *Visidial* in their model kitchen.

Design and the retailer

TRANSFORMATION SCENE



FOR TWO YEARS now, the Wolverhampton department store of James Beattie Ltd has retained Gaby Schreiber and Associates as design consultants. Some impressive results of their association are illustrated below and on the next three pages.

The first of many changes were made in the store restaurant; it has been modernised and re-equipped on what the designers describe as "a very limited budget." It was anticipated that the greater attractiveness of this restaurant in its new form would bring in more patrons who would be potential customers for other departments, and, with this in mind, practically the whole of the floor on which the restaurant is situated has now been redesigned. (Work is

The dark oak panelling of the restaurant was not even real oak but paper: stripping it off was an obvious first step in remodelling. The walls are now painted in different colours (biscuit, dove blue, wine red); beechwood Freydun *chairs replace wicker; new ceiling lights, with shallow bowls and spun aluminium reflectors, stove-enamelled wine red, have been installed*

still in progress in some other sections of the store.)

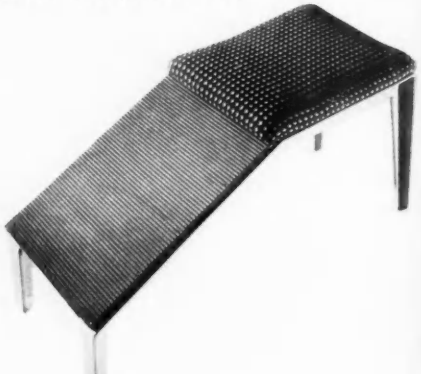
The basic problem was to rearrange the layout of departments in such a way that the wares of all of them would be prominently displayed, thus heightening the temptation for the customer to wander round —to stop, look, and buy—instead of taking a bee-line from lift or stairs to restaurant. With this aim, the central part of the floor has been allocated to the display of merchandise that can be shown effectively on low platforms, well below eye level; as a result, the customer can look across from the top of the main staircase and see something of the displays by all departments on this floor. Ladies' shoes—a growing department at James Beattie's—are immediately opposite the point of entrance.

A heartening feature of the redesign scheme is that the designers did not find it necessary to design everything specially to maintain their standard. There are certainly some fittings which they designed exclusively for Beattie's, but they have brought together also, as parts of a harmonious whole, the standard products of a number of manufacturers—among them Sanderson wallpapers, Donald Bros fabric, Goodearl chairs, shoe-fitting stools by Ernest Race, and light fittings by Frederick Thomas.

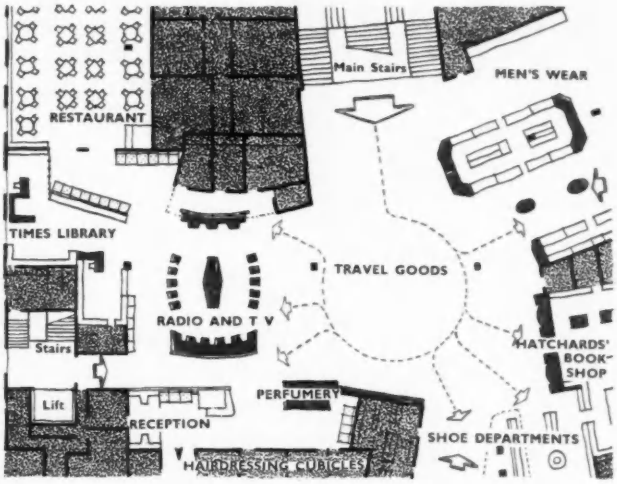
The foreground of the view above has now been transformed into the scene below: the reception lounge for Beattie's hairdressing department, and cosmetic and perfumery sales counter. The counter was made by remodelling existing fittings; its mahogany surface is decorated with gold stars, as also are the wall mirrors and a reception desk and latticed screen in the same department

(*Above*) *A close-up of the new pendant light fitting used in the hairdressing reception lounge. Designed by Gaby Schreiber,* FSIA, *and made by Frederick Thomas and Co Ltd, it is in gold-anodised aluminium, sprayed pink inside. It can be used with three* 60*-watt or* 100*-watt bulbs*

The ladies' shoe department at James Beattie's was remodelled to Gaby Schreiber's design by Harris and Sheldon. The view above shows a screen of beech fins (which is topped by a canopy, coloured dove-blue and wedge-shaped like the department itself) dividing it from the children's section. Internally lit circular showcases are inset in the stockroom wall on right. (Left) Another type of showcase, built on to the end wall. Here, shoes are displayed within the depth of the case. Lighting is concealed behind the acoustic tiles. The wallpaper is a Sanderson pattern—grey and white stripes overprinted with a floral design in the same strawberry colour as the carpet. (Below) The shoe fitting stools are by Ernest Race

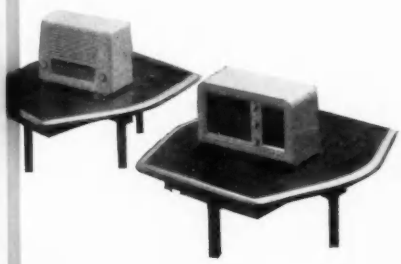


Several of the pieces of furniture used at Beattie's have been designed by Gaby Schreiber and Associates—including (below) the chairs used in the ladies' shoe department, which were made by Geo. M. Hammer and Co Ltd. Their round tapered arms and legs are of beech; the covering material is Donald Bros' *Peveril*, in pink and grey

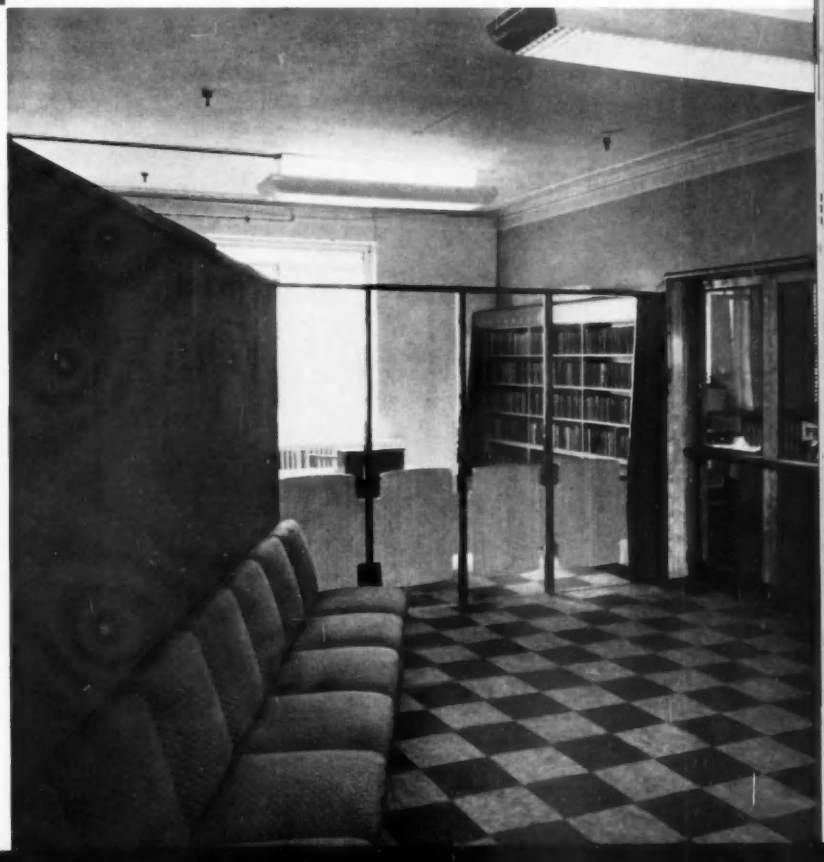


Sketch plan of the second floor at James Beattie's
DOTTED BLUE LINES indicate the traffic flow which was visualised when rearranging the layout of departments;
SOLID BLUE indicates display points;
SHADING, non-selling areas (stock rooms, etc)

Contractors for the departments referred to were: Restaurant, *Jenks Builders Ltd, Wolverhampton;* Hairdressing Reception, Radio and TV, Times Library, *Courtney Pope Ltd, London:* Ladies' Shoes, Hatchards' Bookshop, *Harris and Sheldon Ltd, London and Birmingham*



These low display tables for radio sets are of mahogany with beech edging-strips and legs. Larger ledges for radio and television sets—the main display fittings in the department—echo their trapezoidal shape



(Right) Restaurant foyer furnished with unit chairs, and beyond it The Times Library. In the library, existing bookshelves were remodelled. Along the top, fluorescent lighting runs in a brass trough perforated with the letter T for *Times*

Case history : 1

VERSATILITY IN LIGHTING

The story of the Versalite fittings is told here by their designer, A. B. Read RDI*

THE NEED FOR flexibility and adaptability in light fittings led to the development of the series of units now known by the name *Versalite*.

The normal practice had been to use light fittings—whether pendants or wall brackets—in fixed positions, with each light-source having one definite characteristic. It seemed to us that most interiors require some general light, with higher-intensity lighting of a directional nature in certain working areas.

For shop interiors and for displays of all kinds—whether in stores or exhibitions—there were great possibilities in the effective use of single or multiple adjustable units which were reasonably efficient and low-priced.

Requirements such as these led to the evolution of the reflector that was to form the basic unit of the Versalite range. When we tackled the design of this reflector, we were confronted by the fact that to bring the wiring to the lampholder through the *end* of the reflector tends to restrict movement—it makes the problem of designing a widely adjustable reflector more difficult. The idea therefore arose of bringing the wire in at the side, and hence, the turning of the reflector on the shade-ring of the lampholder. In this way considerable movement is made possible while the lampholder and wiring remain static. There is an advantage, too, from the viewpoint of safety; this arrangement minimises wear on the electric flex.

The design of the Versalite reflectors, and of the range of fittings in which they are used in a variety of groupings and assemblies, arose quite naturally—without any great conscious effort—from practical considerations such as I have outlined above.

Designers should always be chary of inviting comment on their designs before their ideas have crystallised and have passed the crucial test of the designer's own self-criticism. If we had not felt sure of ourselves, we might have been influenced by the comments of certain sections of the electrical trade, and letters and articles that have appeared in various trade journals, clearly indicating a strong prejudice against these "egg-shaped" reflectors. In that case, the loss would have been ours, for the form of the reflectors, though apparently repulsive to some, has been accepted, enthusiastically welcomed, and used by a considerable number of architects, interior decorators and display designers. Any discouragement the originators may have felt has been completely dispelled by the effective use of Versalite fittings in increasing numbers at home and abroad.

The fittings were first shown to the public in the *Design at Work* exhibition in 1948; more recently they have been seen in various Festival exhibitions. We do not believe that they are the last word in light fittings. Production conditions have always to be borne in mind in industrial design, and nowadays those conditions do not remain static for long. When supplies of staple materials run short, the introduction of new materials must be considered; even shortages can serve as a spur to inventiveness on the part of the designer.

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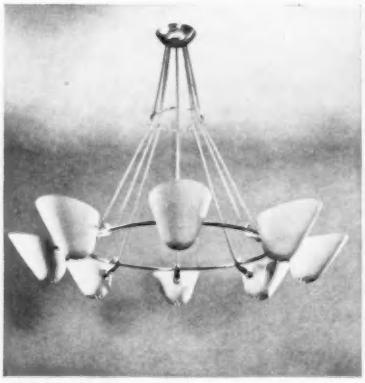
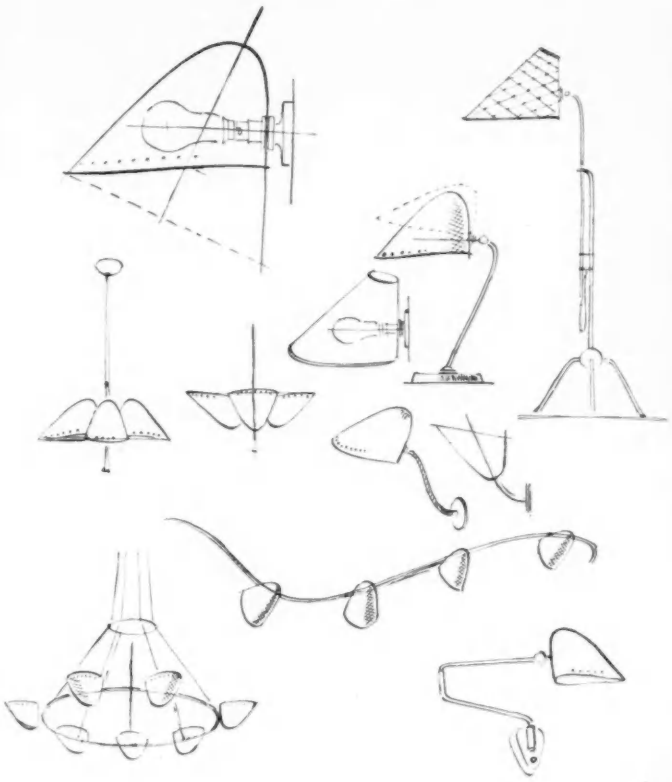
* *Director of Design, Troughton and Young (Lighting) Ltd*

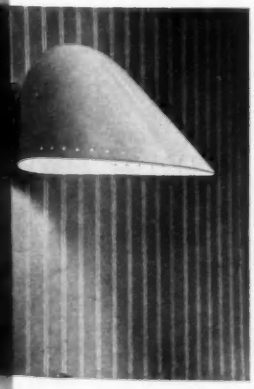




The designer's early recognition of "the need for flexibility and adaptability" is evident from his rough sketches reproduced—in much reduced size—above. Besides the method of construction of the basic fitting, they suggest several possible arrangements of the units.
Some of the fittings which have been produced are illustrated below and on the front cover. They gain further variety from the number of colours in which the reflectors are available
Turning the reflector on the shade-ring of the lampholder enables the light to be directed where it is wanted

Spinning a reflector. At all stages in the development of this range of fittings, the production processes to be used were borne in mind

(Below) This desk lamp makes use of the standard Versalite reflector



Case history : 2

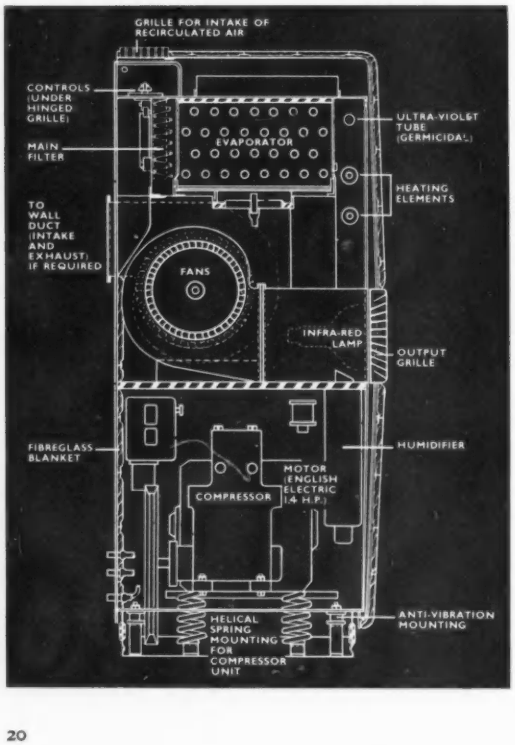
A BRITISH AIR-CONDITIONING UNIT

AIR-CONDITIONING EQUIPMENT, in the form of self-contained units, has in the past been almost exclusively a product of American industry. The latest equipment of this kind is unusual in being entirely British and still more unusual in being designed throughout by a consultant industrial designer, Herbert Norman James, NRD, who was commissioned by the manufacturers, Stewart King Industries Ltd.

The firm's early research into the development of room air-conditioning units had been based on experiments in glasshouses: because of the difficult conditions encountered in them, it was considered that research of this kind would "improve the breed" of units for both room and glasshouse use. In point of fact the resulting units, besides selling widely for room air-conditioning, are being used for glasshouse air-conditioning: the manufacturers are exporting them, complete with special glasshouses, to Trinidad, for use in research work with a direct bearing on world food problems. There is evidently a need for such equipment in tropical areas where agricultural and horticultural research under glass is handicapped by the climate.

With these special requirements in mind—and with the engineering assistance of Richard Walker, now the firm's works manager—a unit was evolved which would be more versatile than American air-conditioning units (with which, indeed, it is intended to compete in their home market).

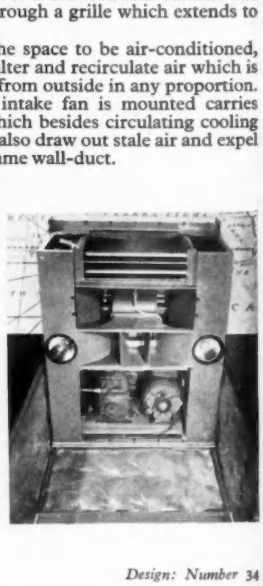
The new unit—the Autoclima—is made in three models for use in different climates. The basic function of all three is the same: to ventilate a room by circulating a quantity of fresh air in it and drawing stale air out. Any of these models may additionally



HOW THE AUTOCLIMA WORKS: Air is drawn into the unit by a duct projecting through an outer wall. It passes first through an aluminium-wool filter in the duct and then, being mixed with recirculated room air, through the main filter, which is of pleated long-staple cotton-wool. Next, an evaporator condenses and extracts the moisture. The dried air is then drawn over the heating elements and ultra-violet lamps (in models in which these are installed) by an aluminium fan. The fan drives it forward and out into the room at an even pressure, through a grille which extends to the full width of the cabinet.

According to the use of the space to be air-conditioned, the unit can be arranged to filter and recirculate air which is already in the room with air from outside in any proportion.

The shaft on which the intake fan is mounted carries another fan of larger size, which besides circulating cooling air in air-cooled models, can also draw out stale air and expel it from the room, using the same wall-duct.



(Right) Swinging the case forward and downward on its hinge gives access to most of the components. It is attached to the front of the frame by this hinge. On the inner walls of the case can be seen an insulating blanket, which is sealed in a Pliofilm envelope and stud-welded into position. (The yellow panels referred to in the article were not in position when this photograph was taken)

be fitted with radiant heat or—a unique feature, of special interest to hospitals, clinics and food establishments—ultra-violet germicidal lamps.

The controls are placed beneath the grille for recirculated air, in the top of the case, and it is hinged to give easy access to them. Once they are set, the Autoclima functions automatically.

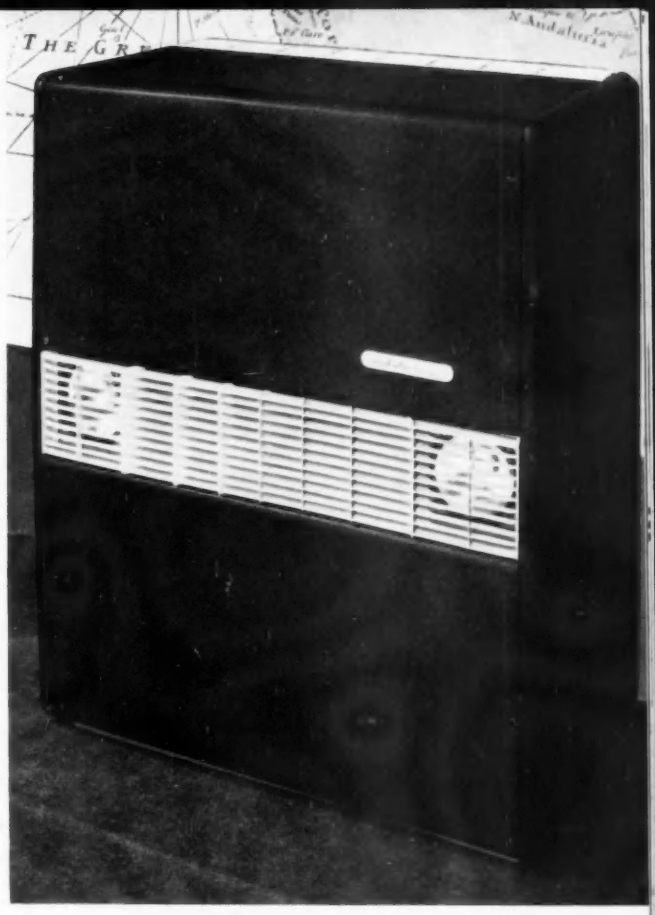
The working parts—divided into three main assemblies—are mounted on a steel frame. The mechanism shows an intelligent use of colour; the assemblies and sub-assemblies which form part of the main load-bearing structure are coloured grey to indicate that they need not (and should not) be dismantled. All necessary servicing and replacement of parts can be effected by the removal of panels which are coloured yellow.

An industrial-design problem involved in the design of any air-conditioning equipment, if it is to be agreeable to live with, is the elimination or at least reduction of noise. In the Autoclima the steps taken to solve this problem include: dynamic balancing of the compressor assembly to ensure vibration-free running, rubber mounting for the fans and their motor, and bonded rubber vibration-dampers for the attachment of frame to base (which is of chromium-plated 16-gauge steel).

This case—like the frame—is made of 20-gauge sheet steel. It is attached to the front of the frame by a full-width piano-type hinge.

The main grille, from which the conditioned air is sent out into the room, is in the front of the case, at a distance from the ground which enables it to have its greatest effect between floor level and a height of approximately 7ft., *i.e.*, in a zone sufficient to cover all normal indoor activities. The position is also convenient from a production standpoint; as it is halfway between top and bottom of the case, it enables identical pressings to be used for the two side panels of the cabinet, instead of distinct left- and right-hand panels, in spite of the fact that the front is not flat but has a slight swelling outward, scarcely more noticeable than the entasis of a classical column.

The case is finished in baked enamel, with either a black crackle or an off-white plain surface. Its front is unbroken except by the grille and a nameplate above it. This nameplate is vitreous-enamelled, with the word *Autoclima* in plated letters, flush with the background of deep yellow enamel. The lettering is in an informal script: it will no doubt date as other "handwritten" trade-names have dated, but in air-conditioning, where technical improvement goes steadily on, the equipment dates also, and "fashionable" lettering is no liability, provided the manufacturers



The new unit was shown in the Dome of Discovery; its export markets already include Venezuela, Peru, West Indies, Fiji, East and West Africa, Europe, the Middle East and Far East

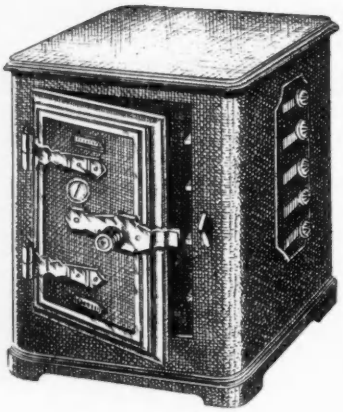
are willing to change it when they change their model.

Since the main market for air-conditioning units is in distant countries, packing for export is important. Stewart King Industries Ltd rightly regard this as a design problem closely related to the design of the unit. The export packing case is bolted—not nailed or screwed—together, and the timber of which it is made is pressure-treated by the Tanalising process, to render it immune to attack by termites, fungus or other tropical pests.

Inside the case, wooden frames faced with foam rubber pads hold the unit securely—but not too rigidly—in position. Precautions against excessive damp or dryness in the air during transit include dessicants placed inside the equipment, a Pliofilm envelope into which it is heat-sealed before leaving the factory, and a wrapper of heavy Kraft paper to protect the Pliofilm.

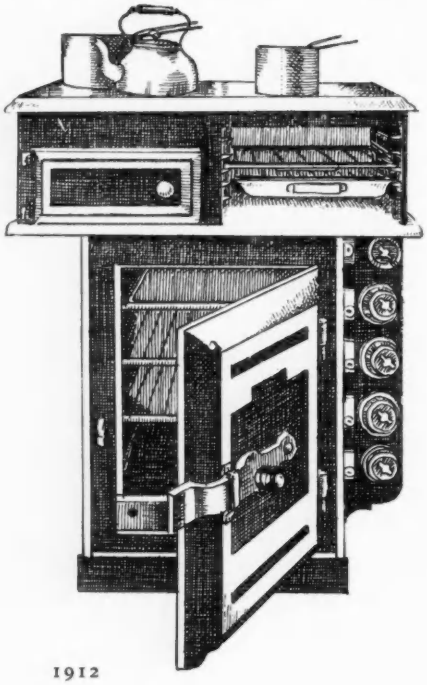
A. D.

The drawings are by John Patrick

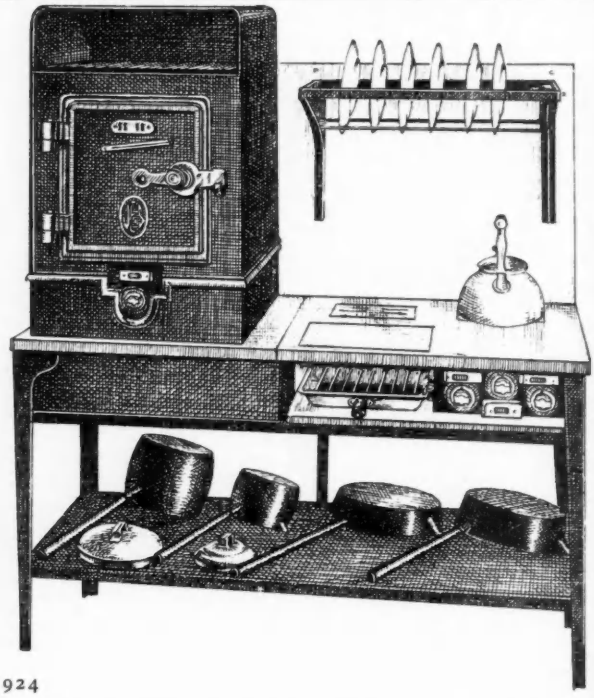


1893

1909



1912



1924

1893: This early cooker by Crompton and Co had five separately controlled elements and a door thermometer. Oven temperature reached 350°F in about 15 minutes. Cast iron, brass and tinplate were the usual materials: the servant problem made the polished surfaces of tinplate unpopular, and encouraged the introduction of more efficient lagging. In 1894, observation windows and an incandescent oven light were fitted.

1909: This GEC cooker and a logical development from it appeared in the same year; the development was to replace the separate appliances by hotplate tables adjoining the oven on either side. The year 1909 also saw another, but short-lived, innovation: the dining-room cooker, with polished marble top and oak sides.

1912: In this Carron model, there were two boiling plates, a hot-cupboard and a grille, and the interiors were white porcelain-enamelled. It took many years to improve on this design. An electric range by the same makers incorporated a drop door to the hot-cupboard and a full-size inner glass door to the main oven.

The changing shape of the electric cooker

ELECTRIC COOKER DESIGN has progressed spasmodically during its 60-odd years. Apart from occasional small cookers of the "biscuit box" type, early models clung to the pattern of the standard gas oven. It is only comparatively recently that the particular characteristics of electric cooking (such as the relatively even heat-distribution throughout the oven space) have been recognised sufficiently to encourage independence in design.

A much debated feature of cooker design has been the oven level. Theory and practice both favour table height, which lends itself most readily to the horizontal arrangement, but in the United Kingdom small kitchens, shortages of material (and hire purchase?) have virtually standardised the upright style.

In the 1890's and early 1900's, ovens were often placed waist-high, with electric saucepans, kettles and frying pans ranged alongside. The first "built-in" horizontal cooker came in 1909; and in the next year, following the lead of the gas cooker, hotplates were incorporated in the top. From then until immediately before the 1939 war, both types were produced.

In the mid-1930's, a Tricity design, with the oven built into the kitchen wall, provided an ingenious answer to the need for space-saving and adequate height. This arrangement still has some followers in the USA; but constructional difficulties have probably prevented it from becoming very widely accepted. Hotplates and grille cannot be incorporated in it, but must go back to the old separate arrangement.

During the 'thirties, controversy ranged over the merits of tight- and loose-fitting doors, angle and cabriole legs, solid and tubular plates, and the need for thermostatic control. In the 1934 Belling cooker, a large glass panel in the oven door preceded the reintroduction of the inner glass door, in 1938. It was in the latter year, too, that "cabinet" cookers came into fashion. The space below the oven was now used for a drawer or, in one instance, for a panel electric fire. Colours were used more daringly, and with more practical success. The drop door made a reappearance: Transatlantic influence at work!

The best of immediate post-war design went into the export trade. In models which have become available since, the lines are even more smooth than in their predecessors; a serious attempt has been made to include the switches as an integral part of the design, and the thermostastic Simmerstat has become general.

In 1946, a *Britain Can Make It* designer showed a "cooker of the future" with the oven up high, but post-war manufacturers have almost ignored this experiment. In some new houses, kitchens are larger, with floor-space for a wider cooker; time and motion study becomes more insistent. What, then, is the answer?

SHEILA M. GODFREY

1924: This style was introduced in the early 'twenties and was still in production in 1935. Its chief drawback originally was the rather wasteful use of space below the cooker proper: this was remedied later by installation on top of cupboards, or, in at least one case, above a refrigerator. Made by the Jackson Electric Stove Co.

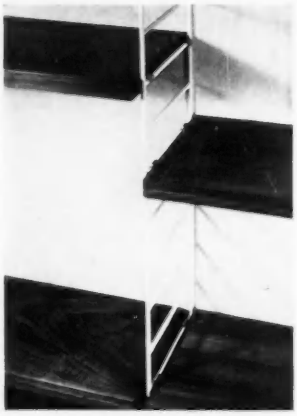
Today, the need for export sales is reflected in British cooker design—especially in the Creda *Comet* (right). This is only 15 in. wider than conventional upright cookers. The oven, on the left, has grille and plate-warming drawer beside it; there is cupboard space—full-width—below.

DESIGN OVERSEAS

TWO EXHIBITIONS of Scandinavian furniture and domestic design, to be held in London shortly, give topical interest to these photographs, all of which show goods from Sweden and Denmark.

The exhibitions are: 9 October to 13 November, at Heal's, 196 Tottenham Court Road, W1—displaying Scandinavian products which are on sale in this country: during November, at the Tea Centre, 22 Lower Regent Street, SW1—an exhibition arranged jointly by the Tea Centre and the Council of Industrial Design, of goods selected by designers' associations in Norway, Sweden and Denmark.

(Left) Danish laminated armchair in mahogany and birch. Designed by Peter Hvidt and O. Mølgaarde Nielsen and made by Fritz Hansen



This system of bookshelving won a recent competition organised by the Swedish publishing house of Bonniers. Shelves in two widths (8in. and 12in.) hook on to the rungs of painted metal ladders. Hooks are staggered so that two shelves can be supported from one rung. Designers, Karin and Nisse Strinning

DESIGN has already noticed the work of Ingrid Atterberg for Upsala-Ekeby AB, Sweden. This illustration (above) is from a range of pottery in black and white, called *Grafika*, which she has recently designed

(Right) The occasional table, in walnut and beech with bent laminated top, is Danish—designed by Hans J. Wegner; the smoke-coloured decanter and glasses are from Sweden; the fabric is a Danish printed cotton sateen named *Hothouse*, designed by Arne Jacobsen. These pieces, and the chair illustrated on page 24, will be shown in the exhibition at Heal's

Training the designer

Furniture from Beckenham

1

THOUGH BECKENHAM, KENT, is not a furniture manufacturing centre, the Department of Furniture Design and Cabinet-making at Beckenham School of Art and Crafts is well—unusually well—equipped with basic types of machinery which are in current use in the industry. Sharing a workshop with the Technical School, the Department has access to a variety of machines, including a forming press which enables its students to design and produce such pieces as the chair illustrated above. The plywood frame of this chair was made in the school from veneers presented by a manufacturing firm (Thames Plywood Manufacturers Ltd) for purposes of experiment.

To receive material from such a source will suggest a further reason for the liveliness of Beckenham's furniture department: its close relationship with industry. There are other indications of this state of affairs. Besides full-time students, the School caters for people employed in the furniture trade in its evening classes and apprentices' day-release classes. The curriculum for all groups is wide; it includes the technology, making and history of furniture as well as geometry, drawing and design. From time to time, students pay visits to factories.

Much thought is given to the right use of modern materials and manufacturing techniques, and—in the words of the Head of the Department, P. Yabsley—"it is held that any young man going into industry must know as much as possible, before leaving the school, of the conditions in which he will work, the materials and equipment with which he will have to deal, and the social factors which will govern the kind of work he ought to produce. It is regarded as an obvious duty that the school should take its part in providing industry with efficient personnel capable ultimately of taking responsibility."

Photographs on this page are reproduced by courtesy of The Cabinetmaker.

2

3

1: The chair referred to in the article above is made of plywood, with seat and back of dyed sashcord

2: This armchair, in mahogany, has a Dunlopillo seat and rubberised hair back. The cushion is supported on tension springs. Covering material was woven by a student of the School

3: Steam-bent framing members give the small table its distinctive shape; they have three laminations of mahogany interleaved with two of rosewood. The decoration of the table-top consists of circles sliced from a length of duralumin tube and spots cut from quarter-inch brass rod

DESIGN AND MANAGEMENT

Points from papers read at the 1951 *Design Congress*

RT type London bus, on AEC chassis

THE FIRST INTERNATIONAL congress of industrialists to discuss their design policies was organised by the Council of Industrial Design, and held at the Royal College of Art, London, on 19 and 20 September. About 250 chairmen, directors and managers of firms in Britain, Europe and the USA were invited to this 1951 Design Congress—an official Festival of Britain event.

The theme of the discussions was *that design policy in industry is the responsibility of high-level management*. It is hoped that papers presented at the Congress will be published later in book form; meanwhile we quote, below, a few of the points raised in them:

SIR COLIN ANDERSON
of the Orient Line:

We, who have paid immense attention to design—unique attention in our own field—cannot *prove* that our efforts pay for themselves in drawing passengers towards us. It can only be proved that what we have done has been noticed and welcomed by the cognoscenti of this and other countries and by many of our customers among the travelling public. A few of our passengers, on the other hand, have criticised our efforts, sometimes with a high degree of eloquence: these have, significantly, always been members of what it is now fashionable to describe as the older age-groups. . . . Our adherence to a belief in the importance of design remains in the nature of an act of instinct—and perhaps of faith.

We long ago discovered that our publicity designing became quite impossible if it all had to be passed by the Board of Management. We found that a single guiding intelligence was needed, and that his inevitable errors were many times outweighed by the uncompromised directness of his decisions. The control of our design policy, not only in publicity but in the widest sense, has been canalised through one director. . . . The designer has not been required to submit himself and his designs to the approval of formal committees.

DANTE GIACOSA, Director of Engineering, SA Fiat, Italy:

The car can be regarded as the most typical and fascinating product of our age. The general public flock nowadays to motor shows and prove competent and interested critics of the different shapes and styles of body-work, arguing with the same ardour and passion as was aroused by painting and sculpture during the Italian Renaissance. . . .

The two main Fiat branches, one for cars and the other for commercial vehicles, both include sections dealing with artistic design. These sections consist of a considerable number of designers and a laboratory in which scale and full-size models are constructed. . . .

The greatest responsibility in determining the main features of a new model should fall upon the sales manager; but during the elaborate process of preparing the selection of the design, the most important role is played by the director of the design group. Upon him and his colleagues must inevitably depend the success of the final product.

The head of the design group should have the opportunity of growing to maturity in the works itself, so that he can absorb the special characteristics of the company's policy and maintain past tradition. . . . The ideal solution is for the engineer responsible for design to be also an artist. If he combines the technician and the artist equally within himself, his most expressive design will always have that technical touch to differentiate it from a similar design produced by the pure artist: he cannot stop at the purely superficial aspect, but is driven on towards technical considerations and the purpose behind the design.

LORD LATHAM, Chairman,
London Transport Executive:

Design is one of the personal responsibilities of the Chairman of the undertaking. . . .

My Publicity Officer has a watching brief on such matters as the design of our bus stops, shelters and vehicles, as well as his prime responsibility for the printed word and the printed picture.

In the design of buses and coaches we are very proud of our own designers, but we also pay tribute to those industrial designers who have sometimes been called upon to help. What we refuse to do is to hand over design to the dictates of any outsider. The industrial designer who is willing to work as one of a team will from time to time find a welcome at London Transport, but we have no time for the overweening omniscience of some industrial designers who seem at times to think that the virtues of good design have come as a revelation personal to themselves.

R. T. LAUGHTON, CBE, Managing Director, Royal Hotel, Scarborough:

When my brother Charles left home to go on the stage, I was left to carry on with the hotels. I had no knowledge of decoration and no artistic flair: all I had was the appreciation of what my brother had done and a realisation that it was important to the business. So far as I could, I adopted his methods. In the bedrooms he had used plain painted walls, plain carpets and curtains and bed coverings made from modern fabrics; and in each room he had hung a small picture or some *objet d'art* to give the personal touch. We use almost the same methods today, except that we find carpets with a small design more practical.

I have often thought that after a room is newly decorated it would be a good idea to put up a notice giving the names of the firms who made the carpets, curtains and covering fabrics and wall-

continued overleaf

continued from page 27

papers, and the name of the decorator. It would interest our guests, it would be good for trade and it would emphasise to the manufacturers what valuable co-operation there is to be had from the hotel business. . . . There has been so much interest in the decorations at the Royal Hotel that I have produced an illustrated souvenir book, which finds a ready sale in the hotel.

W. H. GISPEN, of Gispen's Fabriek voor Metaalbewerking NV, Holland:

Next to social organisation and to a certain extent sales policy, industrial design is the only point of contact in industry with the emotional life. . . .

Pointing to the material results of Gispen's design policy, I only want to mention the fact that out of a staff numbering about 300 people there are only two sales representatives. Their task is not to collect orders, but to soothe the impatient clients by telling them that instead of a year they will only have to wait ten months for delivery of the goods.

Prof. EGIDIO BONFANTE, of Ing. C. Olivetti and Co, S.p.A., Ivrea, Italy:

Industrial design and advertising appear as two quite separate branches, but can be regarded as two different specialist activities belonging to the same root—the business of applied arts. . . .

The publicity man can ably co-operate in many cases with the design group, since he is himself to some extent an industrial designer.

Olivetti's latest product, the Scribe *portable typewriter. Marcello Nizzoli was responsible for appearance-design; the technical designers were Giuseppe Baccio and Ottavio Luzzati. The British price, £29 10s, includes the Tygan carrying case, designed by John Waterer,* FSIA*; in Italy, the same machine is sold in a cardboard box with webbing supports and handle*

SIR KENNETH LEE, Bt, LL D, Chairman, Tootal Broadhurst Lee Co Ltd:

Day-to-day and year-to-year responsibility for carrying out design policy in this company has been delegated to about 20 executives. It is an essential part of the policy that they shall be capable of appreciating the aesthetic qualities of a product as well as its marketing possibilities. . . .

From the first acceptance of a design idea, the limitations and difficulties of processing are considered. Information on all improvements in technique is immediately passed on to the designers, so that they can co-operate in the development of new ideas or methods. . . .

Attempts are even made in design selection to steer the public away from making-up the firm's materials into types of garment for which the particular cloth is not entirely suitable. . . .

The effects of price level bear on the type of design used. Bearing in mind the social responsibilities of large-scale production, it is the firm's aim to meet consumer demands in the widest possible market. Short runs on high-price exclusive articles are not our business.

Any given range of the company's products will consist of a carefully calculated number of "classic" designs and a certain number of enterprising experimental designs. The inclusion of these experimental patterns is essential to the retention of interest in, and even the survival of, any line of goods.

It is the firm's belief that a pattern which has sold well must have some intrinsic value as a design, and that when this evidence is produced, it is the task of the designer to interpret and use that evidence.

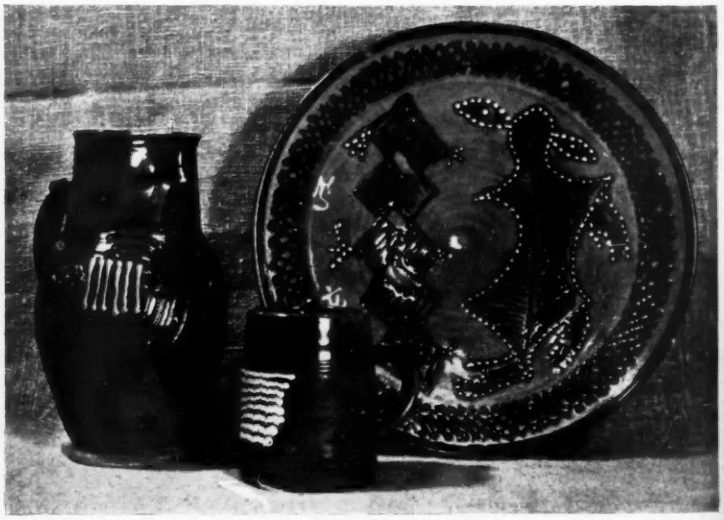
Designing for world markets may well become more simple as styles become less national, owing to the wide circulation of films and magazines, and as the general interchange of ideas of living tends to reduce the purely national approach to design. The steady falling-off in the use of national dress for women is an indication of this trend.

A further selection of points from papers read at the 1951 *Design Congress will be published in next month's issue of* DESIGN

Memorial exhibition

AN EXHIBITION of the work of T. S. Haile, who was killed in a motor accident in 1948, was recently held at the Crafts Centre of Great Britain. Though Haile's work as a potter is highly esteemed by his fellow-craftsmen, he thought of himself primarily as a painter. He studied at the Royal College of Art from 1931 to 1935, and then taught for some years—mostly in the United States, where much of his best work was done. After four years' service in the Forces he made slipware, first at Bulmer in Suffolk, then at Shinners Bridge Pottery, Dartington. He was only 38 when he died.

Many of Haile's best productions are in museums, in this country and in America. The slipware illustrated was made at Bulmer in 1946.



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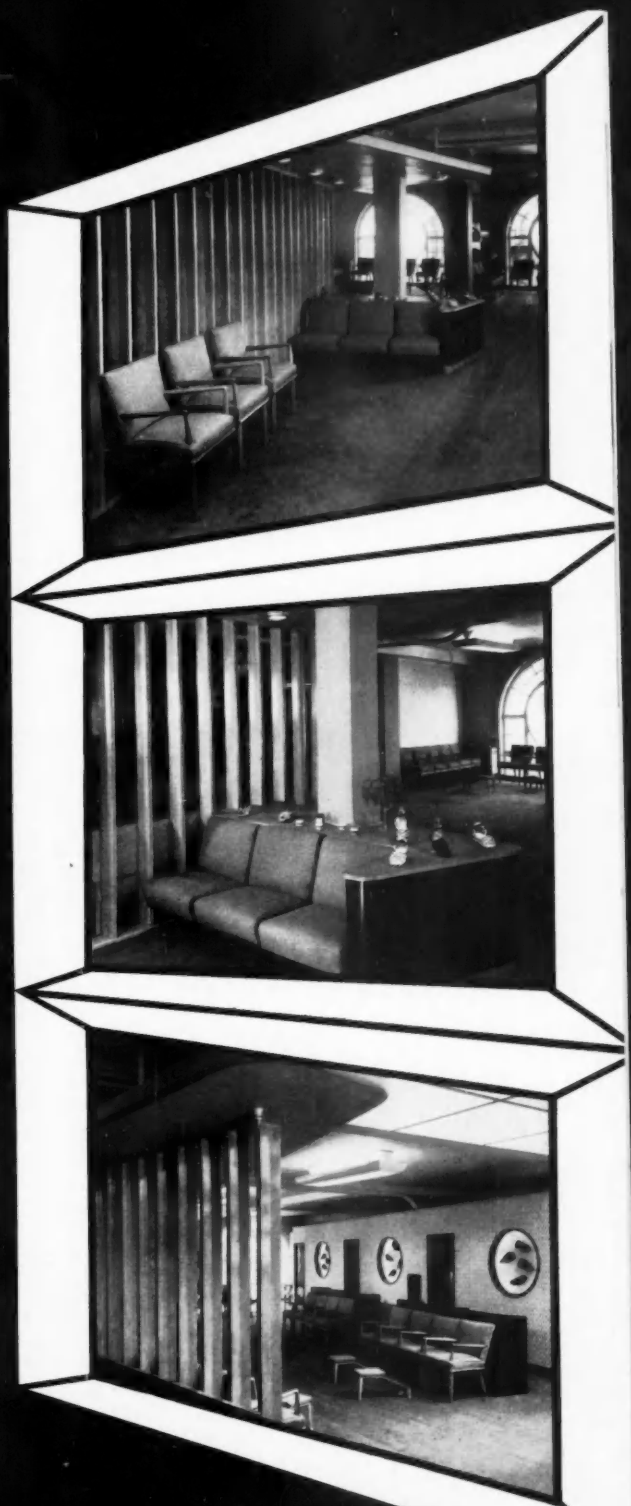

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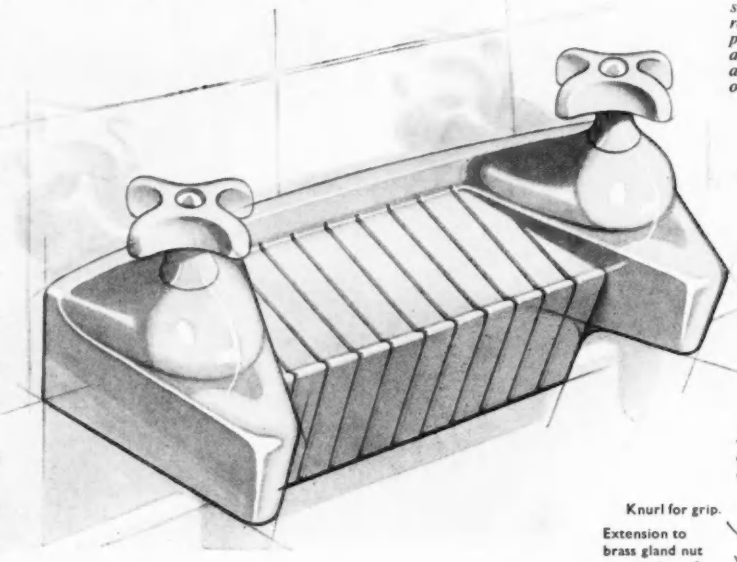
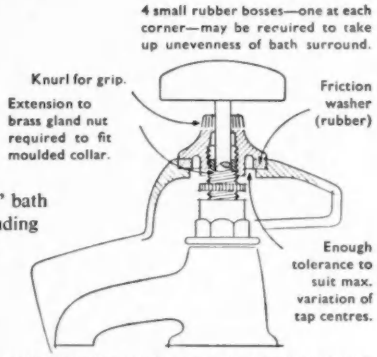
Designer's Diary No. 1

This is the first in a series of indicative designs for moulded plastics articles by the B.I.P. Product Design Unit. The series seeks to illustrate how technical requirements can be met to produce pleasing, readily mouldable articles. Reprints of these announcements will be supplied on request.




4 small rubber bosses—one at each corner—may be required to take up unevenness of bath surround.
Knurl for grip.
Extension to brass gland nut required to fit moulded collar.
Friction washer (rubber)
Enough tolerance to suit max. variation of tap centres.

SUGGESTED METHOD OF ATTACHMENT

The Product. The bathroom tap unit is designed to 'tidy up' bath faucets, with a saving in production costs. Savings are effected by shrouding the metal faucets, thus enabling them to be reduced to a minimum section, consistent with castability; by eliminating the need for fettling, filing, polishing and plating.

The Design. The main component of the product is long and rather shallow and might have been conceived in flowing curves. This treatment, however, would adversely affect strength. Note, therefore, the drastic changes in form, incorporated to obtain maximum strength and rigidity. Even the small drain channels contribute, forming natural strengthening ribs on the flat underside. The diagram illustrates how the shroud is held in position by a moulded collar screwed down on to the tap. The design is of a simple nature for ease of moulding in straightforward up-and-down moulds.

The Material. 'Beetle' Melamine moulding powder is chosen for its excellent resistance to water, particularly hot water. Nevertheless, some contraction and expansion of the moulding will take place, due to changes of temperature and humidity. This could result in distortion, or even cracking, were not provision made for it by the silicon rubber washer, on which the moulding can 'float' *(see diagram)*.

No polishing for housewives, either, this way. The moulding can be cleaned in a trice with a damp cloth.

The B.I.P. Technical Advisory Service will assist industrial designers and manufacturers who use plastics mouldings in their production processes. Advice is freely offered regarding product styling, mould design, choice of materials and moulding techniques. The Service exists primarily to assist your own designers and technicians regarding those problems peculiar to plastics moulding, with which only a specialist can be completely conversant.

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LETTERS TO THE EDITOR

Ravilious

SIR: With the South Bank Exhibition nearing its end, it is surprising to me that nowhere, as far as I know, has there been an illustration or reference to the delightful tribute paid to Eric Ravilious in the Lion and Unicorn building. I can only hope that the camera has recorded it in order that the name and work of this great artist and industrial designer may be further perpetuated.

GEOFFREY DUNN,
Bromley, Kent

Buses

SIR: I cannot imagine why the Birmingham and Midland Motor Omnibus Co Ltd are so keen about their bus front (DESIGN, August, p. 31). The Birmingham City Transport Department's Crossley bus I find mediocre in design, but the positive ugliness of the other bus defies words.

The directors of both these bus companies should come to London to find out how the LTE builds beautiful buses without needing to rely upon "zooty" radiator and bonnet designs for their effects.

A LONDONER

Interiors

SIR: Paul Reilly's article on "The Return of the Interior Designer" (July DESIGN) makes encouraging reading, but I think he over-emphasises the influence for good of the exhibition technique on present-day interior design.

Certainly, in shop interiors, exhibition technique can be used sometimes with happy results but to carry it further is disastrous. Interior design calls for a more studied and serious approach than is required for ephemeral exhibition work. . . .

MAURICE A. WIMBLE,
South Croydon

Japan

SIR: I shall be much pleased if you will publish this letter in DESIGN, as I collected and annotated the material on Japanese toys introduced in December 1950 issue of the magazine (DESIGN, No 24, pages 12-14). The toys presented are a very nice collection and I should have been all the more pleased if more countries could have been included.

The famous jug designed for Wedgwood by the late Eric Ravilious (above, left) and the "delightful tribute" to its designer, in the South Bank Exhibition, to which Geoffrey Dunn refers in his letter. In this display, all the objects depicted in the lithographed design were brought together in reality—with the Ravilious drawing mounted alongside

I would like to know in this connection, to what extent foreign designers are interested in Japanese industrial design (as well as fine arts) and I shall be willing to exchange material between countries.

MITSUO YAMAGATA,
Contributing Editor,
Kogei News (*Industrial Art News*)

¶ Readers who wish to make contact with Mitsuo Yamagata should write to him direct at 470 Chofu Unoki-cho, Ota-ku, Tokyo, Japan. EDITOR.

Chipboards

SIR: We noticed that in the August DESIGN (page 32), you referred to a new board made from wood waste and produced in continuous lengths.

We feel your article may be a little misleading since it gives the impression that this material is already available on the market; as a matter of fact, this is not so. . . .

Similar materials are available in this country in sheets normally 8ft x 4ft—*e.g.*, *Plimberite* and *Weyroc*. Both these boards comply to specification issued by the British Chipboard Manufacturers' Association and they are capable of all the finishes and woodworking operations set out in your article.

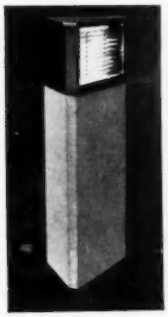
There are many other chipboards manufactured on the Continent, but from our experience as distributors of these materials, the present British products are far superior to anything made on the Continent.

R. F. A. MALLINSON,
Mallinson and Eckersley Ltd,
Salford, Lancs

Errata

In DESIGN for August (page 4) the captions for two South Bank bollards were transposed: they should read as below.

The handrail in The Lion and The Unicorn pavilion was designed by Margaret Casson, not by Richard Guyatt as stated in the same article (page 6); and the magazine rack illustrated on page 7 is made of brass, not steel.

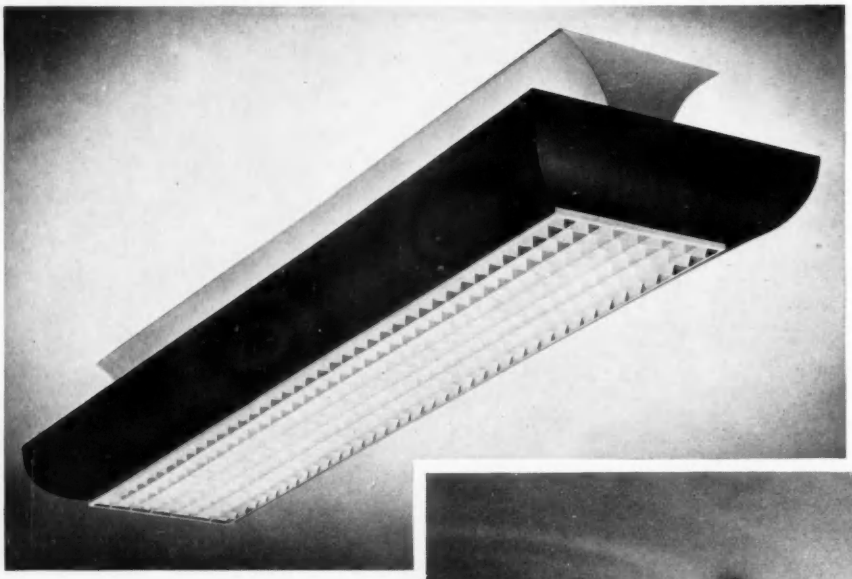


Designed by H. T. Cadbury Brown, ARIBA, in consultation with Edison Swan

Designed by Hugh Casson, MA, FRIBA, in consultation with G E C

FREDK THOMAS & CO. LTD.

designers and manufacturers



a 300 watt pendant (right)
designed by Gaby Schreiber FSIA
and
a twin 80 watt fluorescent
Ceiling Fitting (above)
were made by us for
Messrs James Beattie Ltd
Department Store

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be seen by a visit to our
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New products

THE DOMESTIC washing-up machine remains a dream for most housewives (and their husbands). In the catering business such machines are an everyday reality—the latest addition to their ranks being the *Streamline* cutlery washer, made by Concentric Manufacturing Co Ltd, Birmingham 24, which takes 200 pieces of cutlery at a time—1330 per hour. After the cutlery has been washed and sterilised, it is dried by hot air, and so is ready for immediate use when it is taken out of the machine.

The washer is made principally of stainless steel and aluminium alloy; it takes its power from a ¼ horse-power electric motor. Except for loading and unloading, all operations are automatic. A safety device cuts off the power whenever the lid is opened.

TO THEIR RANGE of combined polishing and carpet-shampooing machines, R. G. Dixon and Co Ltd have recently added the *Marine Dixon* — a machine with a special protective finish to resist sea-water corrosion. It can be used for a variety of jobs including scrubbing, and even holystoning, wooden decks. The holystoning adaptation consists of an aluminium back to which are clamped three segments of holystone.

Shown at the Engineering and Marine Exhibition, the *Marine Dixon* is already used in a number of liners, including the *Queen Mary*, *Queen Elizabeth* and *Caronia*.

The cutlery washer referred to in column 1

New books

'THE UNSOPHISTICATED ARTS', drawn and described by Barbara Jones (Architectural Press, 25*s*). Appearing at the same time as the much praised exhibition of popular art at the Whitechapel Art Gallery ("Black Eyes and Lemonade"—open to 6 October), this book deals with the same kind of subjects. Roundabouts, hearses and stuffed animals all come within its ambit, which is described as "the things that people [meaning, apparently, The People—which is different] make for themselves or that are manufactured in their taste." Many chapters of *The Unsophisticated Arts* were first published in *The Architectural Review*.

British Furniture Today, by Ernö Goldfinger, is the 18th volume in the "Chapters in Art" series published by Alec Tiranti Ltd (7*s* 6*d*). Ninety-eight illustrations occupy most of its pages; some of these—but by no means all—will already be familiar to readers of DESIGN. The brief introductory text will serve to remind young designers of some functional problems involved in the design of domestic furniture.

The Silk Book was published to coincide with the International Silk Congress held in London in September. Its illustrations include, besides colour plates, 17 actual samples of silk fabrics. John Lewis designed and W. S. Cowell Ltd printed the book. (The Silk and Rayon Users' Association, 49 Park Lane, London W1, 21*s*.)

Lettering: a Source Book of Roman Alphabets by John C. Tarr (Crosby Lockwood, 18*s*). This book includes 56 quarto pages of alphabets, which show written and engraved letters as well as printing types. These are preceded by a concise historical introduction.

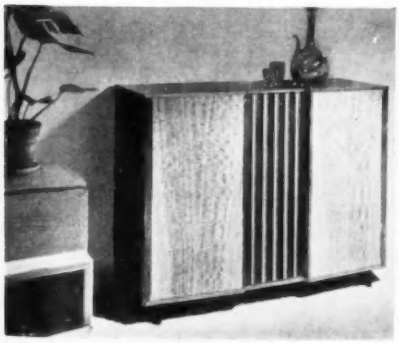
High Victorian Design by Nikolaus Pevsner (Architectural Press, 12*s* 6*d*) is justifiably described on the wrapper as "a penetrating and detailed examination of a selected 120 1851 exhibits."

Freight Handling: report of a specialist team which visited the United States in 1950. (Anglo-American Council on Productivity, SW1) 2*s* 6*d* post free.

The New Society: the Anatomy of Industrial Order by Peter F. Drucker (Heinemann, 15*s* 0*d*). Theme: "The world revolution of our time is 'made in USA' . . . the true revolutionary principle is the idea of mass production."

Aspects of Form: Symposium on Form in Nature and Art, edited by Lancelot Law Whyte (Lund Humphries, 21*s* 0*d*), issued in collaboration with the Institute of Contemporary Arts on the occasion of their exhibition "Growth and Form."

continued on page 35



FROM THE RADIO EXHIBITION: *The number of radio and television sets which look "at home" with contemporary furniture, though small, is growing. These new models are: Berkeley radiogram by Ace Radio Ltd (Victor Taylor,* MSIA, *staff designer) with automatic record-changer on one side, radio receiver on the other, loud-speaker between: Ferguson table radiogram by Thorn Electrical Industries Ltd, in walnut with brown and gold speaker fabric—careful design reducing the apparent height of the cabinet (Peter Bell,* MSIA): *Philips table television set of unusually restrained design, with walnut cabinet, grey Rexine front, cream plastic mouldings*

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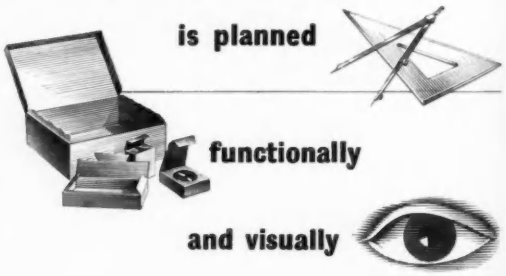

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continued from page 33

Elementary Textile Design and Fabric Structure by John Reid, FTI (Textile Institute, 10 Blackfriars Street, Manchester 3, 12*s* 6*d*). Revised and enlarged edition of a 1931 book for students—particularly those interested in cotton fabrics—written by a former Head of the Textile Department, Royal Technical College, Salford.

Manufacturers' publications

Rowney Pocket Catalogue of Artists' Materials. 1951 edition now available from George Rowney and Co Ltd, 10-11 Percy Street, London W1.

Biro. An album of illustrations of Biro products and presentation, designed by W. M. de Majo and L. Bramberg.

BIP in Practice. A booklet which explains what the BIP Group is and does—including a useful list of the firm's technical publications.

The Beetle Bulletin. First issue of a twice-yearly house organ of the BIP Group, published (free) by BIP Publicity Department, 245 Oxford Street, London W1.

Design in Fireplaces. Illustrated catalogue from Broad and Co Ltd, 4 South Wharf, Paddington, London W2.

The Story of the British Gas Turbine. A Festival brochure "produced with the co-operation of leading manufacturers in the industrial gas turbine field" by Sidney-Barton Ltd, 27 Old Bond Street, London W1.

The G and T Handbook of Furniture Facts: first British edition of an American pocket text-book. Edited by Leslie Lewis; published by Greaves and Thomas Ltd (103 North Weald Road, Clapton, London E5) 3*s* 6*d* post free.

Extrusions in Hiduminium. An illustrated catalogue—of large page size, unusually well-designed—of some products of High Duty Alloys Ltd, Slough, Bucks.

Names

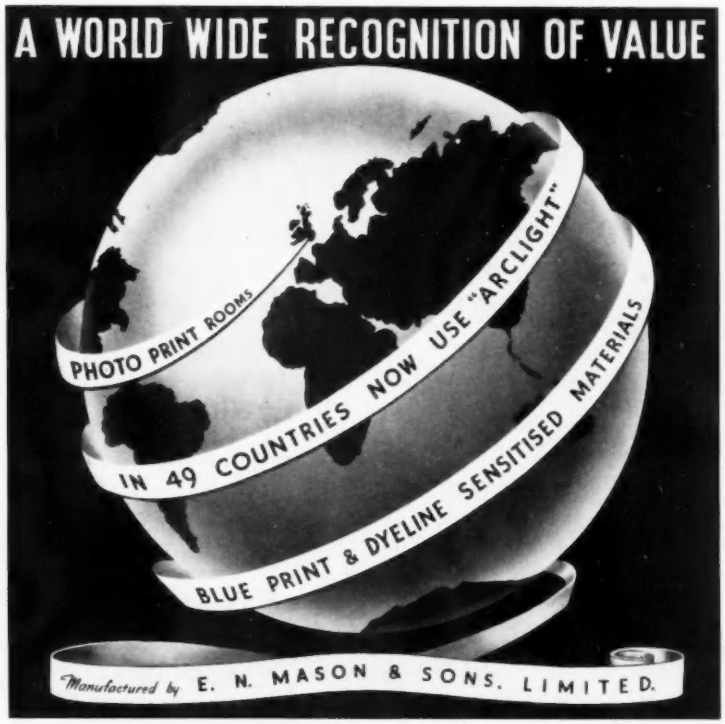
SIR JAMES SWINBURNE, FRS, Chairman of Bakelite Ltd from the company's inception until 1948, has resigned his directorship. The following new directors have been appointed: P. HUFFMAN, N. H. DOCKER, C. C. LAST, G. W. HODDS.

MARIAN MAHLER, MSIA, designed the Morton Sundour fabric used in the first-class library of the new Orient liner *Oronsay* (DESIGN, August, page 16).

J. KIRKPATRICK has been appointed chief designer of United Ebonite and Lorival Ltd. He joined the firm from technical college at the age of 16 and from 1949 onwards was assistant to the chief designer.

Mrs EDNA VEEVERS has won the prize offered annually by the FBI Industrial Art Committee for a Royal College of Art student. Her designs for weaving gained her this award, and she is to join a Manchester textile firm as junior designer.

MEENAN AND CO, Belfast wholesale and retail furnishers, were chosen by the Northern Ireland Festival of Britain Committee to carry out the furnishing and supplying of the exhibition room shown on the front cover of August DESIGN. They also furnished the modern farmhouse in the same exhibition, and for one month from the opening of the exhibition put on a special display, devoted entirely to contemporary furniture, at their showrooms in Donegal Street.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'CRYSTAL DESIGNS.' Copies of this souvenir booklet, including the article by M. Hartland Thomas on "The Festival Pattern Group" reprinted from DESIGN, with colour and additional black-and-white illustrations, are available from London Typographical Designers Limited, 90 Ebury Street, SW1, at 2s 9d a copy, post free. (Special terms for quantities.)

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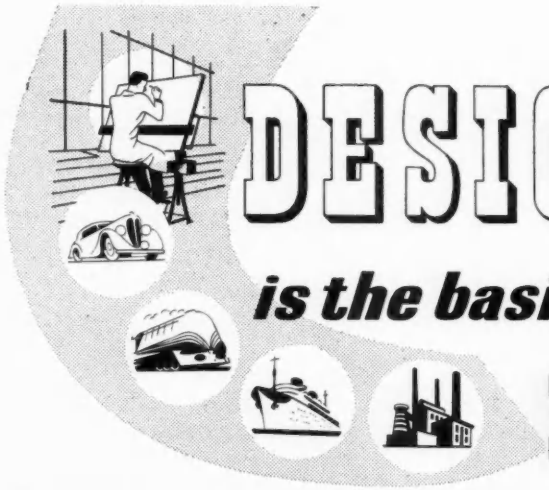

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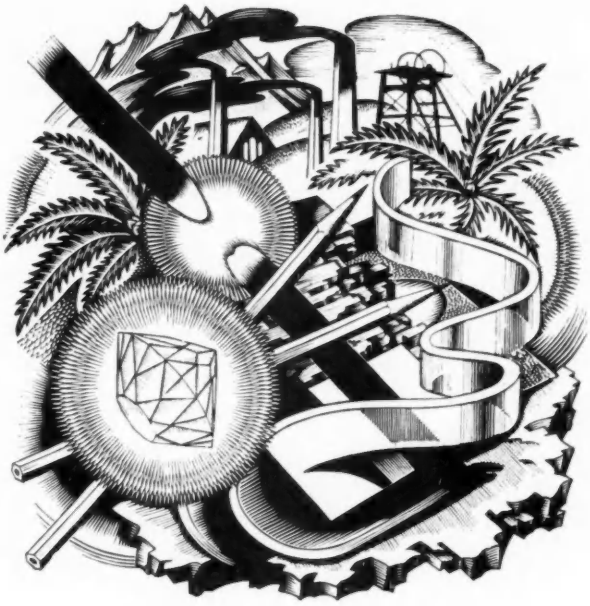

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